

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019522**Date Inspected:** 24-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Qiu wen**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG Assembly Bay- 14.

The following Non Destructive Testing (NDT) Inspection was carried out as per the ZPMC submitted Notification No.08276.

Ultrasonic Testing (UT)

This QA performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated a UT report for this date. The members are identified as OBG weld Components. Total number of welds UT Tested: 12 No's. The weld designations inspected were as follows:

1. SEG3013S-214
2. SEG3013Q-112,113
3. SEG3013N-238
4. SEG3013AA-103,106
5. SEG3013X-005, 485, 486, 490, 590, 584.

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During UT of weld joint identified as SEG3013V-167, this QA observed the steel backing is buckled and gap found between joint root to steel backing as measured by this QA was approximately 6mm. The length is approximately 200 mm. This QA marked the affected area and informed ZPMC Quality Control (QC) Certified Welding Inspector (CWI) identified as Mr. Qiu wen of this issue. This QA also informed the above issue to Lead QA inspector (verbally). Lead QA Inspector informed to AB/F Inspector identified as Mr. Peter shaw. Mr. Peter shaw informed to lead QA that at present UT notification will be cancelled and AB/F will submit a RFI to CT concerning this issue and the steel backing would be corrected in a manner compliant with the contract documents. Refer the attached photos for further details.

This QA did not generate an incident report for the above issue as per the lead QA Inspector's instruction.

This QA Inspector randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW) Repair welding of weld joint identified as SEG3020BB-010. Welder is identified as 020146. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC personnel observed appeared to comply with Welding Procedure Specification (WPS): WPS-345-FCAW-2G (2F)-ESAB-FCM-Repair. The repair welding was being performed as per approved Welding Repair Report (WRR) No: B-WR20146. This weld was previously rejected by ZPMC QC personnel and recorded on UT report B787-UT-18580.

Shielded Metal Arc Welding (SMAW) Repair welding of weld joint identified as SEG3020BB-001. Welder is identified as 067942. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-345-SMAW-2G (2F)-FCM-Repair. The repair welding was being performed as per approved Welding Repair Report (WRR) No: B-WR20146. This weld was previously rejected by ZPMC QC personnel and recorded on UT report B787-UT-18580.

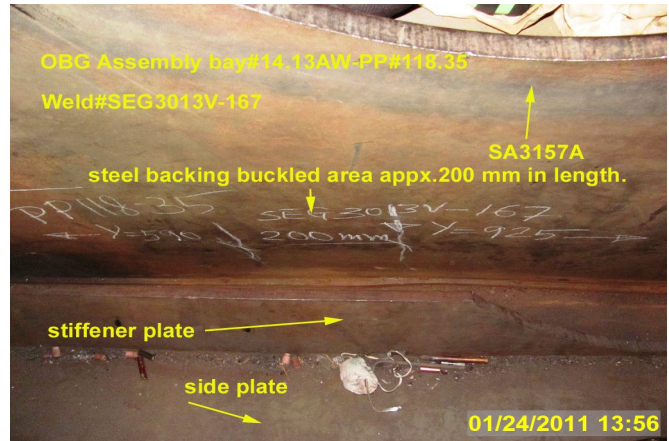
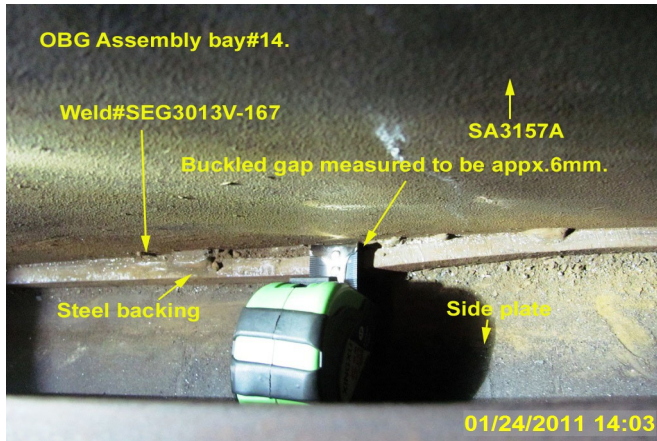
FCAW welding of weld joint identified as DP3171-001-427,022. Welder is identified as 204730. American Bridge/Fluor (AB/F) QA is identified as Mr. Shen jian. The welding variables recorded by QA personnel observed appeared to comply with WPS: WPS-B-T-2232-ESAB.

SMAW welding of weld joint identified as SEG3020BB-009,091,027,093. Welder is identified as 067609. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-P-2114-FCM.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Prabhu,Surendra

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer